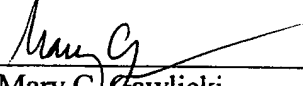




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November 9, 2004

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DESCRIPTION OF AN INVENTION

For an Inventor's Certificate

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(54) WORKING INSTRUMENT FOR ULTRASOUND DISSECTION OF BIOLOGICAL TISSUE

1

The invention relates to surgical instruments.

Working instruments are known for ultrasound dissection of biological tissue which comprise a mechanism for connection with a source of mechanical ultrasound vibrations and working surfaces. The working part of the instrument has a wedge-shaped cross-section.

When working with such instruments, it is possible for there to be trauma to the biological tissue and for it to be insufficiently separated.

The goal of the invention is to eliminate the indicated inadequacies. To accomplish this, the working surfaces of the proposed instrument are made concave along the length and height of the working part, with the concavity not exceeding the depth to the cutting axis of the working part.

Figure 1 is a schematic illustration of the described instrument, and Figure 2 is a section along the line A-A in Figure 1.

The instrument comprises a mechanism 1 for

2

connection with source of mechanical ultrasound vibrations and working surfaces 2, which are made concave along the length and height of the working part 3 of the instrument. The depth of the concavity does not exceed the depth to the cutting axis of the working part.

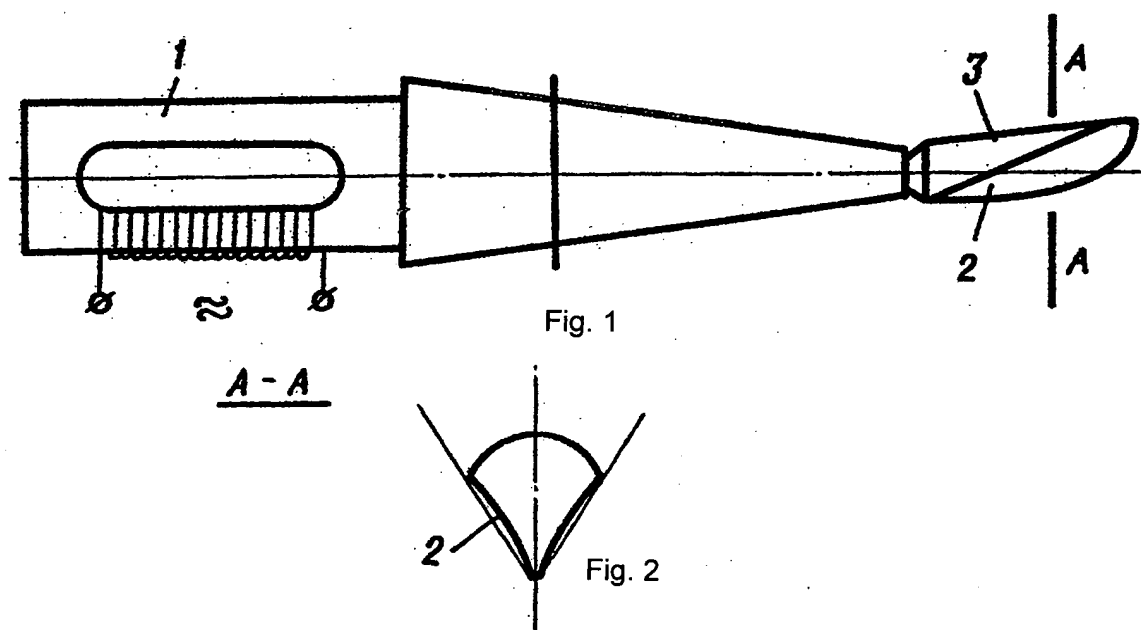
The instrument is used as follows. Mechanical ultrasound vibrations having a certain frequency and amplitude of displacement are delivered from the source through the connection mechanism 1 to the working part of the instrument. Working surfaces 2 are inserted into the tissue. When biological tissue is dissected it is displaced along the concave working surfaces, which promote good dissection of the tissue with a small degree of trauma.

Claims

Working instrument for ultrasound dissection of biological tissue, comprising a mechanism for connection with a source of mechanical ultrasound vibrations and

working surfaces, characterized by the fact that in order to increase the accuracy of dissection and to reduce the trauma of the biological tissue its working surfaces are

made concave along their length and height, with the depth of the concavity not exceeding the depth to the cutting axis of the working part.



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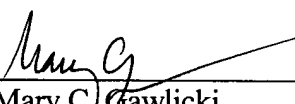
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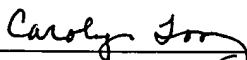


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Carolyn Long

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